

CLAIMS

1. A method of pipelined processing of a data packet (100, 315) in a processing means (700) comprising at least two processing stages (205), said data packet (100) containing
5 information, said method characterised by
- associating (510) information reference (320; 325, 330) to said data packet (315),
said information reference (320; 325, 330) comprising information relating to the length
and position of the information contained in said data packet (315);
- processing (520) said data packet (315) in a processing stage (205); and
10 if said processing (520) of said data packet (315) results in a change of the length or
position of said information contained in said data packet (315), then altering (530) said
information reference (320; 325, 330) in order for said information reference (320; 325,
330) to reflect said change.
- 15 2. The method of claim 1, further comprising the step of:
- adding (505), prior to the step of associating (510), at least one bit (305, 310) to
said data packet (100).
3. The method of claim 2, wherein
- 20 said step of adding (505) comprises adding a header (305) and/or a tail (310) to said
data packet (100).
4. The method of any one of the above claims, the method further comprising the steps of:
- determining, upon the data packet exiting the last of said at least one processing
25 stages, (540) whether any bits of the data packet (315) are superfluous; and, if any bits of
the data packet (315) are superfluous, then
- removing (545) said superfluous bits.
5. The method of any one of claims 1-3, the method further comprising the steps of:
- 30 removing, upon the data packet exiting the last of said at least one processing
stages, at least one bit from the data packet.

6. The method of any one of the above claims, wherein

said information reference (320) is included in additional information (225) associated with said data packet.

5 7. The method of any one of the above claims, wherein

prior to said step of processing (520) said data packet (315), said information reference (320) is stored in at least one register (230) accessible to the processing stage (205) performing said processing (520).

10 8. The method of any of the above claims, wherein

said information reference comprises a length value (325) and an offset value (330), said length value (325) representing the length of the information contained in said data packet (315) and said offset value (330) indicating the position in said data packet (315) of the information contained in said data packet (315).

15 9. A processing means for pipelined processing of a data packet (100, 315), said processing means comprising at least one processing stage comprising a logic unit (210) and a register (220) for storing at least part of said data packet (100, 315), said processing means being characterised in that

20 at least one register (230) for storing information reference (320) associated with said data packet (315) is accessible to said logic unit (210); and

at least one of at said at least one logic units (210) is adapted to operate upon said information reference (320).

25 10. The processing means of claim 9, further comprising

means (715) for adding at least one bit to said data packet (100).

11. The processing means of claim 10, wherein

said means (715) for adding comprises a buffer (720) and a shifter (725).

30 12. The processing means of any one of claims 9-11, the processing means further comprising

means (730) for removing at least one bit from said data packet (315).

13. The processing means of any one of claims 9-12, wherein
means (730) for removing comprises a shifter (735) and a buffer (740).
14. The processing means of claim 11 or claim 13, wherein
5 said shifter (725, 735) is a barrel shifter.
15. The processing means (700) of any one of claims 9-14, wherein
said at least one register (230) for storing information reference (230) is located in
said processing stage (205).
- 10 16. The processing means (700) of any of claims 9-15, wherein
said at least one register (230) for storing information reference comprises one
register (230) for storing a length value (325) and another register (230) for storing an
offset value (330).
- 15 17. An integrated circuit, characterised by
a processing means (700) according to claim 9.
18. A computer unit characterised by
20 an integrated circuit according to claim 9.